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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/517,889 | 12/13/2004 | Jens H. Popplau | SCH-15783 | 1599 |
| 40854 | 7590 | 05/13/2008 | | |
| RANKIN, HILL, & CLARK LLP | | | EXAMINER | |
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| WILLOUGHBY, OH 44094-7808 | | | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3749 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/13/2008 PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,889

Applicant(s)

POPPLAU, JENS H.

Examiner

Patrick F. O'Reilly III

Art Unit

3749

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/13/2004

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). Certified copies of the priority documents have been received.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on December 13, 2004 is acknowledged. The submission is in compliance with the provisions of 37 C.F.R. § 1.97 and 37 CFR § 1.98 and, therefore, the references therein have been considered.

Drawings

3. The drawings are objected to because, in Figure 5, reference characters "10b1" and "10b2" appear to be misplaced.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

On page 6 of the specification, in line 5 of paragraph [0022], the second recitation of the word “the”, which immediately precedes the word “container”, is superfluous and therefore, should be deleted.

On page 9 of the specification, in line 4 of paragraph [0036], reference character “17” is used to denote the “slot”. However, reference character “17” is also used to denote the “gap seal” throughout this disclosure.

On page 11 of the specification, in line 2 of paragraph [0045], the reference to “Figs. 5” should be corrected to read: “Fig. 5”.

On page 11 of the specification, in line 4 of paragraph [0047], the comma, which immediately follows reference character “27”, should be changed to a period.

On page 12 of the specification, in line 6 of paragraph [0048], reference character “8” is used to denote the “slit nozzle”. However, reference character “8” is also used to denote the “conduit” throughout this disclosure. The examiner believes that the reference character corresponding to the “slit nozzle” should be “B” in lieu of “8”.

Appropriate correction is required.

Claim Objections

6. Claim 1 is objected to because of the following informality: the language used in lines 7-9 of this claim is unclear. These claimed limitations should be rewritten using clearer language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. Claim 5 recites the limitation “the discharge cell conduit” in line 2 of this claim. There is an insufficient antecedent basis for this limitation in the claim. The “discharge cell conduit” was not referred to in any of the preceding claims upon which this claim depends. For the purpose of an examination on the merits, the examiner has considered this as a recitation to “a discharge cell conduit”, rather than “the discharge cell conduit” as recited.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-2 and 4-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Poynter et al. (US 6,098,676) in view of Meline (US 5,312,294). These two references, when considered together, teach all of the elements recited in **claims 1-2 and 4-5** of this application.

12. In particular, claim 1 of this application is obvious when Poynter et al. is viewed in light of Meline. Poynter et al. discloses the invention substantially as claimed, including: a discharge cell (shroud 10) mounted in the filling chamber of a blow-fill-machine (12) and communicating, via an exhaust conduit (chimney 65), which runs out of the filling chamber of the blow-fill-machine (12) to the ambient air and, via an aperture (in filling zone 30), with filling chamber of the blow-fill-machine (12), and, mutually oppositely blowing slit nozzles (opposed and spaced apart openings 46, 48 at the ends of ducts 32, 34) being disposed at an edge of the aperture (in filling zone 30) and blowing clean gas (HEPA-filtered air) at each other in a plane (as shown in Fig. 1) of the aperture (in filling zone 30), the discharge cell (10) being configured such that, at least at the filling site (30) of the containers (plastic container 26), the discharge cell (10) at least encloses mouth zones of the containers (26) within filling zone (30 – as indicated by the dashed circle in Fig. 1), and wherein the discharge cell (10) is capable of eliminating extraneous air (through chimney 65), which is introduced by open containers (26), from the filling site (30). Refer to Poynter et al., Figures 1-5; column 3, lines 20-67; and column 4, lines 1-31.

However, claim 1 of this application further discloses that the discharge cell is mounted in a clean room, wherein the clean room is filled with clean gas and encloses container processing machines, the clean room being constantly supplied with clean gas to compensate for gas losses. Poynter et al. does not contain this additional limitation.

Meline, although, teaches an aseptic bottle filling arrangement having a clean room (bell-shaped enclosure 12 supported by posts 13), wherein the clean room (12) is filled with clean gas (supplied by a plurality of nozzles 16 at the top of the enclosure 12) and encloses container processing machines (rotary workstation 11 with filling equipment disposed thereabove), the clean room (12) being constantly supplied with clean gas (17) to compensate for gas losses (removed by suction orifices 19) for the purpose of preventing outside contaminants from entering and spreading into the area containing the container processing machines thereby facilitating the aseptic filling of the containers. See Meline, Figure 2A-2B; column 3, lines 33-36; column 5, lines 22-29; and column 6, lines 31-57. Therefore, when Poynter et al. is viewed in light of Meline, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the blow-fill-seal machine/aseptic filling discharge cell of Poynter et al. by mounting the blow-fill-seal machine and its associated discharge cell (shroud) in a clean room (bell-shaped enclosure 12, which encloses rotary workstation 11), as taught by Meline, in order to prevent outside contaminants from entering and spreading into the area containing the blow-fill-seal machine thereby facilitating the aseptic filling of the containers.

13. In regard to claim 2, Poynter et al. further discloses that the discharge cell (shroud 10) encloses at least an upper zone of the container (plastic container 26) within filling zone (30 – as indicated by the dashed circle in Fig. 1). Refer to Poynter et al., Figure 1; column 3, lines 37-47. Therefore, Poynter et al. in view of Meline also meets the language of this claim.

14. In regard to claim 4, Poynter et al. further discloses that the discharge cell (shroud 10) is elongated and tunnel-like (as shown in Fig. 5) and comprises a slot-shaped aperture (between opposed and spaced apart lateral openings 46, 48) in filling zone (30). See Poynter et al.,

Figure 5 and column 4, lines 8-21. Consequently, Poynter et al. in view of Meline also teaches the language of claim 4.

15. In regard to claim 5, Poynter et al. further discloses that a discharge cell conduit (32, 34) is a slot (the lower portions 36, 42 of the respective ducts 32, 34 have opposed and spaced apart slot-like openings 46, 48). Refer to Poynter et al., Figures 1 and 5; column 4, lines 8-10. Thus, Poynter et al. in view of Meline also meets the language of claim 5.

16. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Poynter et al. (US 6,098,676) in view of Meline (US 5,312,294) as applied to claim 1 above, and further in view of German Patent No. DE 42 19 082 A1 ("DE '082"). These three references, when considered together, teach all of the elements recited in **claim 3** of this application.

17. In particular, claim 3 of this application is obvious when Poynter et al. is viewed in light of Meline, and further viewed in light of the DE '082 reference. As described above, Poynter et al., as modified by Meline, discloses all the elements of base claim 1, the claim upon which this claim depends. However, claim 3 of this application further discloses that the discharge cell is bell-shaped and comprises a circular aperture. Poynter et al., as modified by Meline, does not contain these additional limitations. The DE '082 reference, although, teaches a sterile gas filling arrangement having a discharge cell (container top end enclosure 2) that is bell-shaped (as shown in Fig. 2) and comprises a circular aperture (opening 23), wherein sterile gas is fed through the top end of the bell-shaped enclosure (2) and is discharged through the annular gap between the bell lower end and the container, for the purpose of providing a low-cost, sterile filling arrangement for single containers that excludes contaminants by completely circumscribing the outer periphery of the container neck. Refer to DE '082, Figure 2; also refer

to attached English abstract for DE '082. Therefore, when Poynter et al. is viewed in light of Meline, and further viewed in light of the DE '082 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the blow-fill-seal machine/aseptic filling discharge cell of Poynter et al. in view of Meline by forming the discharge cell (shroud 10) in the shape of a bell with a bottom circular aperture, as taught by the DE '082 reference, in order to provide a low-cost, sterile filling arrangement for single containers that excludes contaminants by completely circumscribing the outer periphery of the container neck. See attached English abstract for DE '082.

18. **Claims 6-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Poynter et al. (US 6,098,676) in view of Meline (US 5,312,294) as applied to claim 1 above, and further in view of Klarl (US 5,060,449). These three references, when considered together, teach all of the elements recited in **claims 6-7** of this application.

19. In particular, claims 6-7 of this application are obvious when Poynter et al. is viewed in light of Meline, and further viewed in light of Klarl. As described above, Poynter et al., as modified by Meline, discloses all the elements of base claims 1 and 4, the claims upon which both of these claims depend. Moreover, with respect to claim 6, the modified blow-fill-seal machine/aseptic filling discharge cell of Poynter et al. further teaches a rotary machine (rotary workstation 11) for processing containers (26) that is disposed in the clean room (bell-shaped enclosure 12). See Meline, Figure 2A-2B and column 6, lines 31-40. However, claims 6-7 of this application further disclose that (claim 6) the discharge cell is split longitudinally, with one part of the discharge cell revolving jointly with the machine, another part of the discharge cell being connected to the stationary housing of the clean room, and that (claim 7) neck supports are

mounted on the revolving part of the discharge cell for holding neck-flange bottles. Poynter et al., as modified by Meline, does not contain these additional limitations. Klarl, although, teaches a rotary container machine with an air flushing system having (claim 6) an air discharge cell (gas jet assembly 1) that is split longitudinally along the circumference of starwheel (12), with one part (two circular plate members 10a and 10b) of the discharge cell (1) revolving jointly with the starwheel (12) of the rotary machine, another part (curved guide member 5, which includes jet opening 3 supplied by stationary tube 19) of the discharge cell (1) being connected to the stationary lid of the rotary machine by means of rods (20) for the purpose of optimizing equipment space by enabling an air flushing system to be integrated with a rotary container machine having a rotating inner starwheel. Refer to Klarl, Figures 1-2; column 2, lines 47-68; and column 3, lines 1-61. Klarl further teaches that the rotary container machine/air flushing system has (claim 7) neck supports (semi-circular starwheel pockets, which are adjacent to recesses 22) that are mounted on the revolving part (10a, 10b) of the discharge cell (1) and hold neck-flange bottles (14) for the purpose of securely holding the bottles (14) to the rotating starwheel of the container machine. See Klarl, Figures 1-2 and column 3, lines 56-61.

Therefore, when Poynter et al. is viewed in light of Meline, and further viewed in light of Klarl, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the blow-fill-seal machine/aseptic filling discharge cell of Poynter et al. in view of Meline by splitting the discharge cell (10) longitudinally, with one duct (34) revolving jointly with a rotary machine, and the other duct (32) being connected to the stationary housing of the machine, as taught by Klarl, in order to optimize equipment space by enabling an air flushing system to be integrated with a rotary container machine having a rotating inner starwheel.

Moreover, it also would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the blow-fill-seal machine/aseptic filling discharge cell of Poynter et al. in view of Meline by providing the rotating portion of the rotary container machine with bottle neck supports, as additionally taught by Klarl, in order to securely hold the bottles to the rotating starwheel of the container machine.

Conclusion

20. See attached form PTO-892 for additional pertinent prior art, which was not directly relied upon in this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick F. O'Reilly III whose telephone number is (571) 272-3424. The examiner can normally be reached on Monday through Friday, 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 3749

/Patrick F. O'Reilly III/
Examiner, Art Unit 3749

/Steven B. McAllister/
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